

CLAIMS:

1. A method of transmitting signals from a plurality of first stations to the same second station, said method comprising the steps of:

transmitting first signals comprising a first communication and first associated information from one of said plurality of first stations to said second station;

transmitting second signals comprising said first communication, a second communication and second associated information, said second associated information differing at least partially from said first associated information, from another of said plurality of first stations to said second station; and

receiving at said second station said first and second signals, wherein said second station processes said first and second signals in accordance with the first and second associated information.

2. A method as claimed in claim 1, wherein said first communication comprises speech.

3. A method as claimed in claim 1, wherein said first communication comprises signalling information only.

4. A method as claimed in claim 1, 2 or 3, wherein said first communication is provided on dedicated channels.

5. A method as claimed in any preceding claim, wherein said second communication is data.

6. A method as claimed in any preceding claim, wherein said second communication is provided in a shared channel.

7. A method as claimed in any of the preceding claims wherein said first and/or said second associated information comprise information on the rate of the respective first and second

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signals.

8. A method as claimed in any preceding claim, wherein said first and/or said second associated information comprise at least one code word.

9. A method as claimed in any preceding claim, wherein said first and/or said second associated information comprises first information associated with the first communication and second information associated with the second communication.

10. A method as claimed in any preceding claim, wherein first and second associated information comprise the same information in respect of the first communication.

11. A method as claimed in any one of the preceding claims, wherein one of said first and second stations comprises a base station.

12. A method as claimed in any one of the preceding claims, wherein one of said first and second stations comprises a mobile station.

13. A method as claimed in any one of the preceding claims, wherein said first and second stations communicate using the code division multiple access technique.

14. A method as claimed in claim 13 wherein said first and second communications use different spreading codes.

15. A method as claimed in any one of the preceding claims wherein at least two of said first stations are connected to different control elements, said control elements defining the first and/or second associated information.

16. A method as claimed in claim 15, wherein said elements comprise radio network controllers.

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17. A network comprising a plurality of first stations and a plurality of second stations, each of said first stations being connected to a control element, wherein at least one of said first stations is connected to one control element and at least one of the first stations being connected to a different control element, wherein, in a first mode, when a second station is in communication with a plurality of first stations controlled by the same control element, the first stations transmit identical control information to said second station and, in a second mode, when a second station is in communication with a plurality of first stations which are controlled by a plurality of different control elements, the control information transmitted by said first stations to said second station is different.

18. A network as claimed in claim 17, wherein said control information is used by said second station in said first and second modes to control the processing carried out by the second station in respect of signals received from said plurality of first stations.

19. A network as claimed in claim 17 or 18, wherein said control information is in accordance with a first coding in the first mode and in accordance with a second coding in the second mode.

20. A network as claimed in claim 17, 18 or 19, wherein said first coding has a first number of symbols available using a first number of bits and said second coding has a second number of symbols available using a second number of bits, wherein said first number of symbols is greater than said second number of symbols.

21. A network as claimed in claim 17, 18, 19 or 20, wherein the control information comprises a first number of code words in the first mode and a second number of code words in the second mode, said first number of code words being less than said second number of code words.

22. A network as claimed in claim 21, wherein the number of bits

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defining the or each code word in the first mode is different to that of the or each code word in the second mode.

23. A method of transmitting signals from a plurality of first stations to the same second station, said method comprising the steps of:

transmitting first signals including first associated information and from one of said plurality of first stations to said second station;

transmitting second signals including second associated information, differing at least partially from said first associated information from another of said plurality of first stations to said second station, any data content of said second signals at least partially differing from any data content of said first signals; and

receiving at said second station said first and second signals, wherein said second station processes said first and second signals in accordance with the first and second associated information.